

DRAPER

®

INSTRUCTIONS FOR

50 Litre V Twin Air Compressor

Stock No.05633

Part No.DA50/346TV

**IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND
EFFECTIVE USE OF THIS PRODUCT.**



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GENERAL INFORMATION

These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself. All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product. Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

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Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for a period of 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase.

A proof of purchase must be provided with the tool.

Should the machine develop any fault, please return the complete tool to your nearest authorized warranty repair agent or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England. Telephone Sales Desk: (023) 8049 4333 or Product Helpline (023) 8049 4344.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accident, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

NOTE: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the 12 month period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

Draper Tools Limited

The Draper Tools policy of continuous improvement determines the right to change specification without notice.

Stock no.	05633
Part no.	DA50/346TV
Rated voltage	230V~
Rated frequency	50Hz
Rated input	2400W (3.0HP)
Rated input current	10.5A
Revolutions per minutes (no load)	2,850min ⁻¹
Maximum working pressure	116psi/8Bar
Air displacement	12.22cfm/346L/min
Free air delivery	8.55cfm/242L/min
Vessel:	
Capacity	50Ltr
Adopted corrosion allowance (C)	0.5mm
Actual thickness	2.5mm
Ingress protection	IP20
Sound pressure level	95.0dB(A)
Sound power level	115.0dB(A)
Weight	40kg

WARNING: Always wear safety goggles and ear defenders.

CAUTION: Risk of electric shock. Do not open.

This appliance is supplied with a moulded 3 pin mains plug for your safety. The value of the fuse fitted is marked on the pin face of the plug. Should the fuse need replacing, ensure the substitute is of the correct rating, approved to BS1362 and ASTA or BS Kite marked.

ASTA 
BSI 

The fuse cover is removable with a small plain slot screwdriver. Ensure the fuse cover is replaced before attempting to connect the plug to an electrical outlet. If the cover is missing, a replacement must be obtained or the plug replaced with a suitable type.

If a replacement plug is to be fitted this must be carried out by a qualified electrician.

The damaged or incomplete plug, when cut from the cable shall be disabled to prevent connection to a live electrical outlet.

This appliance is Class I[†] and is designed for connection to a power supply matching that detailed on the rating label and compatible with the plug fitted.

If an extension lead is required, use an approved and compatible lead rated for this appliance. Follow all the instruction supplied with the extension lead.

[†]Earthed  : This product requires an earth connection to protect against electric shock from accessible conductive parts in the event of a failure of the basic insulation.

IMPORTANT:

On products exceeding 2000W it is recommended that the power cable and/or extension cable are fully unwound before a connection is made to the power supply. However, ensure the residual cable does not pose a trip hazard

General Power Tool Safety Warnings

WARNING: When using electric tools basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury including the following.

Read all these instructions before attempting to operate this product and save these instructions.

Safe operation

1. Keep work area clear

- Cluttered areas and benches invite injuries.

2. Consider work area environment

- Do not expose tools to rain.
- Do not use tools in damp or wet locations.
- Keep work area well lit.
- Do not use tools in the presence of flammable liquids or gases.

3. Guard against electric shock

- Avoid body contact with earthed or grounded surfaces (e.g. pipes, radiators, ranges, refrigerators).

4. Keep other persons away

- Do not let persons, especially children, not involved in the work touch the tool or the extension cord and keep them away from the work area.

5. Store idle tools

- When not in use, tool should be stored in a dry locked-up place, out of reach of children.

6. Do not force the tool

- It will do the job better and safer at the rate for which it was intended.

7. Use the right tool

- Do not force tools to do the job of a heavy duty tool.
- Do not use tools for purposes not intended; for example do not use circular saws to cut tree limbs or logs.

8. Dress properly

- Do not wear loose clothing or jewellery, they can be caught in moving parts.
- Non-slip footwear is recommended when working outdoors.
- Wear protective hair covering to contain long hair.

9. Use protective equipment

- Use safety glasses.
- Use face or dust mask if working operations create dust.

10. Connect dust extraction equipment

- If the tool is provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.

11. Do not abuse the cord

- Never yank the cord to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.

12. Secure work

- Where possible use clamps or a vice to hold the work. It is safer than using your hand.

13. Do not overreach

- Keep proper footing and balance at all times.

14. Maintain tools with care

- Keep cutting tools sharp and clean for better and safer performance.
- Follow instruction for lubricating and changing accessories.
- Inspect tool cords periodically and if damaged have them repaired by an authorised service facility.
- Inspect extension cords periodically and replace if damaged.
- Keep handles dry, clean and free from oil and grease.

15. Disconnect tools

- When not in use, before servicing and when changing accessories such as blades, bits and cutters, disconnect tools from the power supply.

16. Remove adjusting keys and wrenches

- Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

17. Avoid unintentional starting

- Ensure switch is in "off" position when plugging in.

18. Use outdoor extension leads

- When the tool is used outdoors, use only extension cords intended for outdoor use and so marked.

19. Stay alert

- Watch what you are doing, use common sense and do not operate the tool when you are tired.

20. Check damaged parts

- Before further use of tool, it should be carefully checked to determine that it will operate properly and perform its intended function.
- Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation.
- A guard or other part that is damaged should be properly repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual.
- Have defective switches replaced by an authorized service centre.
- Do not use the tool if the switch does not turn it on and off.

21. Warning

- The use of any accessory or attachment other than one recommended in this instruction manual may present a risk of personal injury.

22. Have your tool repaired by a qualified person

- This electric tool complies with the relevant safety rules. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

WARNING:

Please read the following instructions carefully, failure to do so could lead to serious personal injury. When using electric tools, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electric shock and personal injury. Read all these instructions before operating this product and save these instructions.

IMPORTANT:

Draper Tools Limited recommends that this machine should not be modified or used for any application other than that for which it was designed. If you are unsure of its relative applications do not hesitate to contact us in writing and we will advise you.

- Learn how to stop the compressor in the event of an emergency.
- Ensure the mains voltage is compatible with the voltage listed on the compressors rating plate.
- Before attempting to carry out any servicing or maintenance operations, remove the plug from the socket and purge all air from the reservoir.
- Never stop the compressor using the mains switch or removing the plug from the socket. Always use the pressure switch.
- After maintenance operations ensure all parts are correctly fitted before running through the set-up procedure.
- Always wear ear defenders when in proximity to the compressor.
- Keep compressors and associated tools out the reach of children. Keep animals and children out of the work area.
- **WARNING:** Avoid contact with moving parts and components prone to high temperatures.
- Do not operate the compressor near flammable materials or dangerous environments.
- Do not attempt to transport or move the compressor with the reservoir under pressure.
- Prior to each use inspect the compressor fully.
- Do not attempt to operate the compressor with damaged, faulty or missing components. Replace components immediately with genuine Draper parts.
- Do not expose to rain or moisture.
- Do not operate the compressor with the air inlet filter missing.
- Do not connect an air hose with a flow rate lower than that of the compressors.
- Do not use the compressors at temperatures below 0°C or exceeding 45°C.
- Do not alter or adjust any safety devices

ADDITIONAL SAFETY INSTRUCTIONS FOR SAFETY VALVES

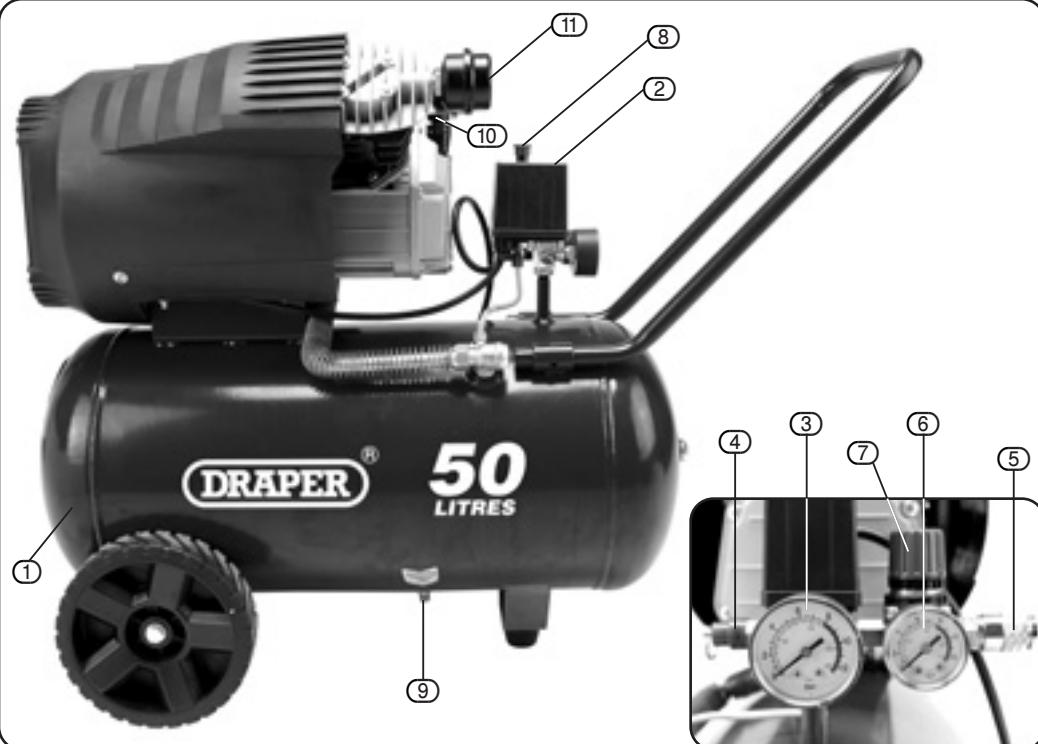
Information: The safety valves are designed and constructed for use exclusively with compressed air, free from impurities. The materials used in construction are suitable for operating the valve at the rated pressure and temperatures. The Viton or NBR gasket conserves the resistance characteristics, even in prolonged use. The valve caulking impedes calibration modification; tampering with the valve and/or changing the constructor's calibration is forbidden.

Installation: Valve installation must be performed exclusively by technically prepared persons, who are responsible and in good health. Checking the integrity of the valve before installation is obligatory. Also, check that the valve pressure is no greater than the operating pressure of the tank or of the system to protect. Check that the discharge flow rate of the valve is greater than the quantity of the air to discharge. The safety valve must be positioned directly on the tank in a vertical position, in a dry, accessible place protected against the weather and far away from liquids or condensation. It must be positioned so as to have sufficient space all around for correct air discharge, without causing damage to persons and/or things. The valve rod must therefore be free in its movement when discharging. The connection between the valve and the part to be protected must be free from all kinds of choking and be as short as possible so as not to reduce the discharge flow rate of the valve itself. The connection passage area must be greater than the valve orifice area. During installation, screw on the valve with a torque spanner using the hexagonal part of the body. Apply a maximum torque of 30Nm, paying attention not to cause any deformation; using pincers, pliers, hammers or tools other than a hexagonal spanner is forbidden. Check that the inlet hole and the shutter are not blocked by glue, teflon or similar materials that could bind the shutter or other functional components. If the valve is replaced, the compressor air contained in the system must be discharged first. We decline all responsibility for damage caused to persons and/or things due to failure to observe these instructions.

Maintenance and inspection: The valve must not be subjected to knocks which may cause deformities. It is obligatory for qualified technicians to make sure that the safety valve functions correctly at least once a year. Valves equipped with a ring must be tested while pressurised to between 80-90% of the calibration value. Pull the ring and release immediately. During the test the valve must definitely open and discharge the air and re-close immediately when the ring is released. It is absolutely necessary to carry out this procedure with the utmost caution because this type of job can be dangerous if adequate safety measures are not taken; wear goggles, a head set and anything else necessary to protect against noise, jets of air, etc. which may be discharged from the valve.

ADDITIONAL SAFETY INSTRUCTIONS FOR PRESSURE VESSELS

1. This pressure tank is mainly intended for static use. It can only be charged with natural air within temperature and pressure limits as specified on the manufacturer's plate and declaration of conformity.
2. Ensure that tank safety and control devices are efficient and flawless. When replaced, the tank should not be under pressure.
3. Drain the condensate off the tank every day.
4. Check for signs of inner corrosion at regular intervals. Tank walls should have a minimum thickness of 1.5mm (DA25/206)/2.0mm (DA50/206).
5. Any kind of welding to this tank is forbidden.
6. The user shall comply with laws on pressure vessel operation in force in the country in which the tank is operated.
7. The construction is mainly effected for permanent load by internal pressure. Cyclic loads are not considered, only for a range of 10% PS.



- ① 25 litre reservoir tank.
- ② Pressure switch.
- ③ Tank pressure gauge.
- ④ Safety valve.
- ⑤ Air line coupling.
- ⑥ Line pressure gauge.
- ⑦ Line pressure regulator.
- ⑧ On/off switch.
- ⑨ Reservoir condensate drain bung.
- ⑩ Oil level dipstick (see page 7).
- ⑪ Air filter assembly (see page 7).

- **SCOPE:** This compressor has been designed and built for intermittent duty applications. Although the compressor is equipped with an overload cut-out, Draper Tools recommend the compressor duty cycle never exceeds 50% and that continuous operation never exceeds 15 minutes.
- In addition to pneumatic tools the compressor may be connected to a variety of other tools intended for washing, spraying and blowing.
- **UNPACKING:** After removing the packing material, make sure the product is in perfect condition and that there are no visible damaged parts. If in doubt, do not use the product and contact the dealer from whom it was purchased.

The packaging materials (plastic bags, polystyrene, etc.), must be disposed of in an appropriate refuse collection container. These materials must not be left within the reach of children as they are potential sources of danger.

Upon receipt of the compressor, ensure all components are present and have remained undamaged in transit.

Retain the packing materials and packaging in case future transportation of the compressor is necessary. We recommend that the packaging is kept, at least within the period of the guarantee.

- **WHEELS AND ANTI-VIBRATION FOOT**

- **DA50/346TV**

Pass the bolt through the wheel and then insert the spacer on the underside of the wheel of the compressor's frame and fit the washer and secure with the nut. To mount the foot pass the bolt through the bracket on the bottom of the tank and then through the rubber anti-vibration foot into the front position.

- **AIR FILTER**

If not already fitted, remove the transit bung from the top of the head and screw the air filter assembly into position.

- **OIL LEVEL**

NOTE: For transportation purposes the oil level dipstick is supplied in a separate bag.

ATTENTION! Remove the plastic bung from the crankcase, fill with oil and replace it with the dipstick.

NOTE: The plastic bung should be retained for future use should it be necessary to transport the unit.

ATTENTION! Prior to any operation check the oil level ranges between max. and min. on the dipstick.

If necessary adjust the level (see page 10).

WARNING: Never operate the compressor with only the plastic transportation bung fitted. Under normal use internal pressure can expel the bung along with oil from the head, possibly leading to damage

- **Positioning**

In order to ensure proper air flow to the ventilation grills ensure the compressor is at least 50cm from any obstacles which may impede air from flowing correctly.

- ON/OFF SWITCH (Figs.1.& 2.):

- **NOTE:** Prior to connecting the compressor to the power supply ensure the pressure switch is in the off position.

On initial start-up open the reservoir condensate drain bung (A)[†], adjust the pressure regulator (B) to the maximum pressure.

† Unscrew bung anticlockwise to open valve.

Pull the pressure switch (C) up to start the compressor.

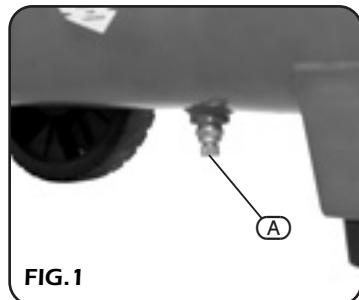
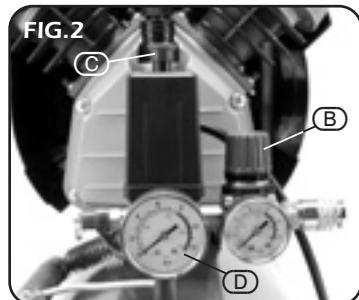
Allow the machine to run for 10 minutes with the air escaping from the reservoir tank before closing the drain bung (A). Ensure the compressor is switched off before doing this. Ensure the tank pressure reaches 8 bar as indicated on gauge (D) before the pressure switch shuts off the motor.

- **NOTE:** When the drain bung is closed the tone from the motor will change.

The compressor motor will automatically restart when the tank pressure drops to approx. 2 bar less than the maximum pressure.

- **ATTENTION:** Never stop the compressor using the mains connection. Always switch off the compressor by pressing the pressure switch button down. The compressed air will be vented from the head and allowing an easy re-start.

- **NOTE:** During correct operation a whistle of compressed air escaping/releasing will be heard when the motor stops and a protracted whistle (approx. 20-30 seconds) when ever the compressor is started with no pressure in the tank.

**FIG. 1****FIG. 2**

- WORKING PRESSURE ADJUSTMENT (Fig.3.):

- **NOTE:** For technical specifications and detailed instructions please refer to the instructions provided with the specific air tool/accessory.

The outlet line pressure from the tank is adjusted using regulator (E). Rotate the regulator clockwise to increase the pressure or anticlockwise to decrease. The pressure is indicated on gauge (F).

- **ATTENTION:** After each use set the pressure to zero to help prolong the life of the regulator and avoid damage.

- AIR LINE CONNECTION (Fig.4.):

The compressor comes equipped with a quick "in line" female connector (G). To insert a male connector, hold collar (H) backward. When fully inserted, release the collar. If a different style of connection is required the connector (G) can be replaced.

- **NOTE:** When fitting the replacement ensure the threads are sealed with PTFE† tape for an air tight union.

† Draper Stock No.63389.

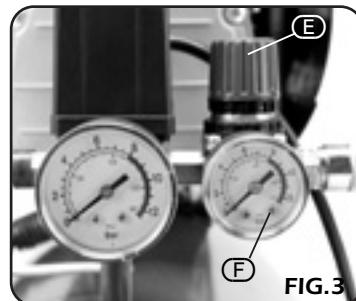


FIG.3

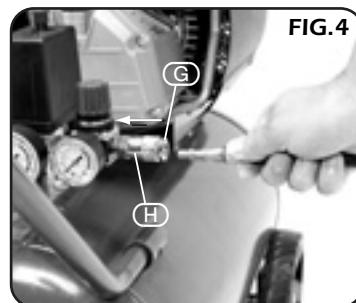


FIG.4

- **NOTE:** Remove the plug from the socket before carrying out adjustment, servicing or maintenance.

In order to maintain the compressor to its optimum, periodical service checks must be carried out routinely. Allowances should be made to adjust the time scale for machines in occasional service with the exception of the safety valve which must be inspected by a qualified service agent every 12 months regardless of use.

- **AFTER THE FIRST 50 HOURS SERVICE**

Ensure that all fixings have remained tight, in particular on the head and crankcase.

Replace the crankcase oil with one from the recommended oil list from below.

- **RECOMMENDED OILS:**

Recommended oils for compressors, (suitable for room temperature from +5°C and +25°C)

SHELL Rimula D extra 15W-40

AGIP Dicrea 100

API CM-8X

BP Energol CS100

CASTROL Aircol PD100

ESSO Exxc Club H150

FUCHS Renolin 104L VG100

IP Calatia Oil ISO 100

MOBIL Rarus 427

TOTAL Dacnis P100

Room temperature below +5°C: ISO 68

Room temperature above +25°C: ISO 150.

- **NOTE:** Never mix different brand or grade oil together.

- **DAILY CHECKS:**

- Before every use check the airline filter/regulator/seperator. Fill the lubrication level up, empty any collected condensate and adjust the line pressure to the accessory as necessary.
- After every use adjust the line pressure back to zero.

- **WEEKLY CHECKS:**

- At least once a week the build up of condensate should be drained from the tankt.

† **In the absence of a filter/regulator/separator to ensure a clean/dry lubricated air supply the condensate should be drained before each use.**

Open the reservoir condensate drain bung fully before tilting the compressor to ensure all condensate is drained. Collect the moisture in a suitable container.

As the compressor is oil free the condensate will contain no lubricate/polutants so requires no special disposal.

Finally close the bung, pressurise the tank fully and switch off the compressor. Open the bung to remove any remaining condensate under pressure.

- **NOTE:** Ear defenders and safety goggles must be worn.

- **MONTHLY CHECKS (Fig.5 & 6.):**

- Remove the air filter housing to access the foam filter element.

- Remove the foam filter to replace or clean it.

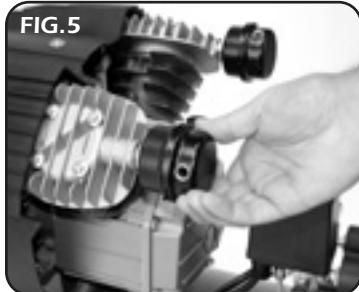
Rinse the filter with water. Make certain the element is completely dry prior to refitting.

- **ATTENTION: Never attempt to run the compressor without the filter element fitted as dust or foreign bodies can enter the pump unit resulting in serious damage.**

This must be carried out more frequently if the compressor is operating in a dusty environment.

The motor must be correctly ventilated during operation. For this reason avoid blocking the air inlets. After use disconnect the tool from the power supply and vacuum the ventilation slots.

If replacement of the supply cord is necessary, this has to be done by the manufacturer or his agent in order to avoid a safety hazard.



- **REPLACING/TOPPING UP OIL (Fig.7 & 8.):**

Remove the dipstick and with a suitable spanner loosen and remove the crankcase bung. Collect the used oil in a container to be disposed of in the correct manner according to european regulations.

- **NOTE:** The oil will drain more rapidly with the compressor hot from operation.

Replace and tighten crankcase bung taking care not to damage the crankcase.

Fill the oil level to max. as indicated in the dipstick.

- **NOTE:** Do not over fill the oil level. Do not attempt to operate the compressor without the dipstick installed.



DISPOSAL

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- Do not dispose of WEEE*
as unsorted municipal waste.



* Waste Electrical & Electronic Equipment.

PROBLEMS	POSSIBLE CAUSES	REMEDIES
Pressure drop in the tank	Air leaks at connections	Allow the compressor to reach the maximum pressure allowed. Switch it off and carefully brush a soapy water solution onto all air connections. Look carefully for air bubbles flowing out. Tighten those connections where leaks are present. If the problem is still present, contact the authorised service agent.
The pressure switch valve leaks when the compressor is idle	Non-return valve seal defective.	Contact the authorised service agent.
The compressor stopped and does not start	Overload cutout operated due to motor overheating Other	Allow to cool before attempting a re-start Contact the authorised service agent.
The compressor does not stop even though the max. pressure allowed has been reached; the safety valve operates	Incorrect operation or pressure switch faulty	Contact the authorised service agent.
The compressor does not reach the pressure and overheats	Compressor head gasket damaged or valve faulty	Contact the authorised service agent.
The compressor is noisy with metallic clangs	Bearing or seizure	Contact the authorised service agent.
Compressor will not start	Ambient temp effecting pressure switch operation	Move compressor to a warmer atmosphere and allow time to warm up prior to restart attempts

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For aftersales servicing or warranty repairs, please contact the Draper Tools Helpline for details of an agent in your local area.

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